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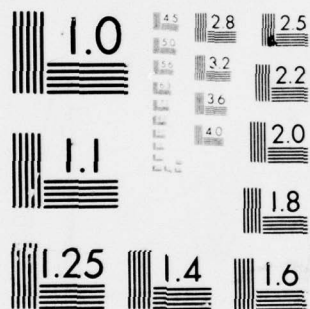
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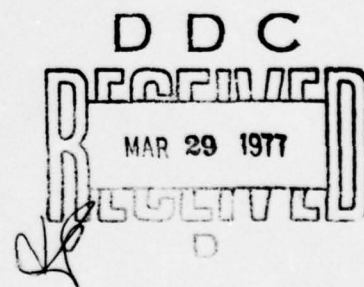
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MOOD EFFECTS ASSOCIATED WITH INCONGRUENCY BETWEEN
EXPECTATIONS AND PERFORMANCE

R. J. BIRSNER
W. B. MC HUGH
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MOOD EFFECTS ASSOCIATED WITH INCONGRUENCY
BETWEEN EXPECTATIONS AND PERFORMANCE

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October 1974

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MOOD EFFECTS ASSOCIATED WITH INCONGRUENCY
BETWEEN EXPECTATIONS AND PERFORMANCE*

ABSTRACT

The interrelationships of expected and objective performance and moods of pleasantness and unpleasantness among 13 members of an intramural softball team are presented. It was found that expectations of success were positively associated with poor performance. Expectations of success and poor performance were positively related to pleasant rather than unpleasant emotions. Unpleasant emotions were found, however, to be associated with successful performance. Objective performance was unrelated to performance ratings by the head coach. These findings may indicate that expectations of success were related to inappropriate reinforcement by the coach and used by the more inexperienced players to maintain motivation.

MOOD EFFECTS ASSOCIATED WITH INCONGRUENCY
BETWEEN EXPECTATIONS AND PERFORMANCE*

October 1974

A basic postulate in research on cognitive dissonance is that unpleasant emotions result from incongruency between expectations and performance. This postulate holds that performance which confirms expectations results in pleasant emotions, while disconfirmation of expectations leads to unpleasantness. The emotional effects of incongruity, however, have been inferred from performance measures. Aronson and Carlsmith (1962), for example, found that those who expected to do poorly but instead did well performed more inconsistently on later trials. These inconsistencies were interpreted by the authors to be representative of discomfort arising from dissonance between low expectations and successful performance. Inconsistent performance was supposedly adopted in order to deliberately worsen performance and make it more congruent with expectations. Later findings by Ward and Sandvold (1963), however, failed to fully replicate these results. Under conditions in which the relationship between objective performance and ability was left ambiguous it was found that only those who were failing, independent of their prior expectations, adopted inconsistent performance. Only failure, whether expected or not, resulted in inconsistent performance.

The assumption that inconsistent performance is a sign of discomfort has been seriously questioned. It is possible that inconsistent performance is the result of trying to find or develop a successful reinforcement strategy and may have

little to do with unpleasant emotion. Feather (1967) states that this may be true especially for situations in which reinforcement is delayed, impersonal, ambiguous, or perceived as invalid. In these situations, high expectations could even be negatively related to performance. Emotion might then be related to the level of expectation alone and not to objective performance. Feather believes that these situations occur frequently outside the laboratory.

It was the purpose of the following research to relate expectations and emotions to performance in a field situation in which reinforcement was delayed and may have been perceived as invalid. Previous research on cognitive dissonance would predict that unpleasant emotions should be associated with expectations which are incongruent with objective performance, while congruency between expectations and performance should be associated with pleasant emotions. In addition, expectations should be positively related to previous experience.

METHOD

Subjects

Thirteen of the 15 members of an intramural softball team sponsored by the Naval Training Center (NTC), San Diego, California, volunteered to serve as Ss. The mean age of the group was 27.7 years (s.d. = 7.6 years) and all were enlisted males in the U.S. Navy with a modal pay grade (rank) of E-5 (Petty Officer Second Class).

Tests and Procedures

All team members completed a mood questionnaire (MQ) consisting of 26 words describing various moods and emotions. The MQ was answered by placing a number next to each word which indicated the subject's perceived ^{level of} intensity for that particular mood or emotion.

number 1 indicated not at all, a 2 indicated somewhat or slightly, and a 3 indicated mostly or generally. Each player was then asked to predict their overall performance in the game scheduled to be played that day. They were told to use their performance in previous games played that season and the expected difficulty of the present game as the basis of comparison. A scale of six choices ranging from 1 (poor) to 6 (excellent) was used in answering this item. These measures (MQ and expected performance) were taken during the 45 minutes preceding each of the last seven games played during the regular season. The games were played at 5:00 P.M. on Tuesdays and Thursdays.

Performance Measures

Two performance measures were used. These were (a) ratings by the head coach and (b) objective measures which included times at bat, runs, hits, batting average, errors and the number of games played. Five minutes after the game the coach was asked to rate the overall performance of each team member on a scale ranging from 1 (poor) to 6 (excellent). The coach was instructed to consider the previous performance of that player as well as the difficulty of the game in making a judgement.

Statistical Analysis

Interrelationships between expectations, performance ratings by the coach, objective performance measures, and moods were determined using Pearson product-moment correlations. Significance levels are $p \leq .05$ (two-tailed).

RESULTS AND DISCUSSION

Table I presents the correlations between average expectations and the objective performance measures during the seven-game series. Expectations were negatively associated with most of the objective performance measures except errors. A near significant relationship was found between batting average and expectations. These findings indicate that players who expected to do well actually did poorly. They had fewer times at bat, made fewer hits and runs, had a lower batting average, and played fewer games. In order to determine whether these expectations might have been based on more successful performance in games played earlier in the season, the objective performance measures from 57 previous games were collected and correlated with expectations reported during the last seven games. As Table I shows, expectations during the last seven games were negatively and significantly related to objective performance measures in the previous 57 games. These results not only replicate the correlations with performance found during the last seven games but indicate that expectations during the last part of the season were not congruent with previous experience.

The association between expectations and average ratings by the head coach were insignificant ($r=.04$), which suggests that judgements by the coach were apparently not related to expectations about performance. In addition, evaluations by the coach did not correlate significantly with any of the objective performance measures.

Having found that incongruency existed between expected and objective performance, the emotional consequences of this incongruency were examined. The MQ was divided into pleasant and unpleasant mood scales (12 and 14 words respectively)

based on an unrotated factor analysis of a larger questionnaire containing these 26 words and 14 others. (This larger questionnaire had been previously administered to a group of 600 Navy enlisted men.) The average sum of each mood scale was correlated with mean expectation level. Expectations were positively associated with pleasantness ($r=.59$, $p<.05$). The correlation between expectation and unpleasantness was negative but insignificant ($r= -.32$). The intercorrelation of the two mood scales was also negative and insignificant ($r= -.27$). Although pleasantness was not related significantly to any of the objective performance measures, it was found that unpleasantness was positively and significantly associated with hits ($r=.58$, $p<.05$) and had a nearly significant association with times at bat ($r=.49$, $p<.075$). Unpleasant moods were also associated with objective performance measures in the 57 games played earlier that season. These correlations were: times at bat ($r=.56$, $p<.05$), number of errors ($r= -.74$, $p<.01$); number of games played had a nearly significant association with unpleasantness ($r=.49$, $p<.075$). These findings indicate that although high expectations are associated with poor performance, unpleasant or discomforting mood states are associated with better performance. Both expectations and emotions account uniquely and significantly for objective performance. Those who had lower expectations and felt more unpleasant performed best.

These data would appear to contradict the findings and assumptions of earlier research on cognitive dissonance which would have predicted that high expectations would be associated with successful past performance and that disconfirmation of either high or low expectations would be related to unpleasant emotional states. As mentioned previously, however, emotional states associated with dissonance or

incongruency have never been reported in the manner used in collecting the present data. Emotional response to incongruency may be more unpleasant if emphasis is placed on aversive or punitive reinforcement. This will remain a moot point, however, until emotion is measured under these conditions.

The poor players were also the least experienced as evidenced by the number of games played as well as the number of occasions these players went to bat. It is possible that the poor performers had the highest expectations because they could improve the most with practice. The expectation question asked for a comparison with previous games played, so in making this comparison the poor performers may have been indicating more improvement could occur while the better performers were acknowledging that further improvement would be difficult. The poor performer could therefore remain motivated to play despite a history of failure. If expectations were congruent with performance among the poor performers, they might be reluctant to continue playing. This situation is similar to that described by Radloff and Helmreich (1968) during SeaLab II. Divers who were poor performers reported being significantly happier than those who performed well. Radloff and Helmreich believed this incongruency was necessary for the poor performers to rationalize remaining in the hazardous situation. If the better softball players had reported unrealistically high expectations, they may have become demotivated because the probability of improvement was lower. The inability to meet an unrealistically high goal may also have resulted in shame among the better performers. Weiner and Kukla (1970) have shown that shame is positively associated with failure among better performers.

As previously noted, ratings by the head coach did not validly represent objective performance. The ratings, therefore, appear to be subjective and may

indicate techniques used by the coach to improve performance and maintain team motivation. In order to strengthen motivation among the poor performers, the coach may have been positively reinforcing regardless of performance. This pattern of reinforcement may have been partially involved in unrealistically high expectations and pleasantness, as well as the failure of this group to improve during the season. The coach may have been concerned about the skills and not the motivation of the better players because the performance of this group determined whether the team would win or lose. The coach may have ignored winning performance and attended to the less frequent poor performance of this group, using aversive or punitive reinforcement to minimize and eliminate faulty plays. This interaction may at least partially account for the less pleasant emotions and lower expectations of the better players. If reinforcement from the coach was more positive, immediate, and valid, then more congruent expectations might be possible and performance might improve more among all players. An analysis of reinforcement patterns among coaches and players might provide further understanding of the association between reinforcement, expectations, emotions, and performance.

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Footnotes

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TABLE I

Correlations Between Average Expectations and Objective Performance

Measures for the Last Seven Games and Previous 57 Games

<u>Performance Measures for Last Seven Games</u>	<u>r with Average Expectations</u>
Number of games played	-.62*
Times at bat	-.60*
Number of hits	-.55*
Number of runs	-.65*
Number of errors	-.04
Batting average	-.46†
<u>Performance Measures for Previous 57 Games</u>	
Number of games played	-.58*
Times at bat	-.56*
Number of hits	-.55*
Number of runs	-.49††
Number of errors	-.32
Batting average	-.52††

† $p \leq .10$ †† $p \leq .075$ * $p \leq .05$

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→ head coach. These findings may indicate that expectations of success may be related to inappropriate reinforcement by the coach and may be used by the more inexperienced players to maintain motivation. ↗

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